



Hawaii

Biobased Fuels, Power, and Products State Fact Sheet

Growing a Cleaner, Stronger Economy in Hawaii

Five percent of Hawaii's electricity generation in 1999 came from biomass. The state has an installed biomass generation capacity of 165 MW. Bagasse – the leftover fibers found in sugar cane after sugar is removed – is Hawaii's largest source of biomass. The factories burn bagasse and use the steam to generate electricity, which is sold to local utilities.

There are several biopower projects being conducted across the state. The 56 MW Honolulu Project of Waste Energy Recovery (H-POWER) facility is the city's "waste to energy" plant that sells its generated electricity to Hawaiian Electric Company. The plant provides enough electricity for 40,000 homes and reduces the volume of landfill space on Oahu by approximately 90%. Another example in Hawaii of turning waste into the power is the Hawaiian Commercial & Sugar Company's (HC&S) Puunene Sugar Mill. The primary fuel used in the steam plants is bagasse, the fiber residue of the cane plant. HC&S turns nearly 500,000 tons of bagasse into power annually. The electricity produced meets all the plantation's power requirements. HC&S sells excess electricity to Maui Electric Company, meeting about 10% of the power needs of Maui's homes and businesses.

Hawaii's biodiesel market is booming. In May 2002, Pacific Biodiesel dedicated its new Oahu facility near Sand Island. Along with this new facility, it also opened up a drive-up biodiesel fuel pump which is available to the public. Pacific Biodiesel now has two biodiesel facilities (the other is located on Maui) which helps rid the state of used restaurant cooking oil. The company's facility on Maui saves about 40 tons of used cooking oil a month from entering into landfills by converting it into biodiesel.

Biobased Fuels, Power, and Products in Hawaii

Bio-Industry	Sales (\$1,000)	Employees	Capacity	Number of Facilities
Power	26,820	550	165 MW	9
Fuels	500	3	N/A	2
Products	3,300	30	- -	1

N/A - no information available

- - Comparative capacity data not available among products

Federal R&D Partners

University of Hawaii
(Honolulu)

Biomass Resources

CRP: 21 acres enrolled
MSW: 1,884,000 tons generated
Forest Land: 1,748,000 acres
Poultry: 1,487,000 head
Livestock: 176,000 head



Hawaii has numerous fuel incentives including a tax credit for ethanol production investments, a sales tax exemption for alcohol fuels, and reduced highway taxes for alternative fuels. On July 1, 2001, Hawaii became the only state in the nation to offer a 100% tax credit on an equity investment in a qualified high tech business (QHTB) which includes research done on non-fossil fuel energy-related technology

Federally Funded Biomass RD&D in Hawaii

Select a project
title for details

U.S. Department of Agriculture

- Predicting and Controlling Soil Erosion and Nonpoint-Source Pollution in Hawaii
- Biological Control of Exotic Weeds of Hawaiian Forests
- Effective and Labor-efficient Management of Weeds in Pastures and Native Forests of Hawaii
- Plant-Parasitic Nematode Management in Tropical Crops
- The Relationship Between Oxidation-reduction Potential of Flooded Soil and Taro Yield
- Micro-Crystalline Cellulose from Chemical-Free Pulping of Sugar-Cane Bagasse
- Molecular Approaches for Adapting Plants to Environmental Stress Through the Xanthophyll Cycle

For additional information on RD&D Projects, please click on the project title

For additional information on state activities, please contact:

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